

REMARKS

The Office Action dated November 27, 2007, has been received and carefully considered. Reconsideration of the current objections/rejections in the present application is respectfully requested based on the following remarks.

I. THE ENABLEMENT REJECTION OF CLAIMS 1-9 AND 11

On page 2 of the Office Action, claims 1-9 and 11 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. This rejection is hereby respectfully traversed.

The Examiner asserts that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Specifically, the Examiner asserts that the specification fails to describe a "transition-limiting code."

Applicants respectfully disagree. Specifically, Applicants respectfully submit that the specification is replete with descriptions of transition-limiting codes (e.g., see from page 3, line 18, to page 4, line 12; from page 11, line 1, to page 13, line 4; page 20, lines 15-19; etc.). Also, the two provisional applications (i.e., U.S. Provisional Patent Application Nos. 60/450,349 and 60/494,561) to which the present

application claims priority, and the entirety of which are incorporated by reference in the present application, are equally replete with descriptions of transition-limiting codes.

The Examiner also asserts that the Examiner searched other available references, but could not find a definition for transition-limiting code.

Applicants respectfully disagree. Specifically, Applicants respectfully submit that persons of ordinary skill in the art are well aware of the term transition-limiting code. For example, the following papers and patent publications are readily available and clearly describe transition-limiting codes: U.S. Patent Nos. 5,859,601, 6,526,530, 6,819,137, 6,917,312, 7,113,550, 7,180,957, 7,180,958, 7,180,959, and 7,302,631; U.S. Patent Application Publication Nos. US2004/0109510A1, US2003/0152154A1, US2006/0126751A1, US2005/0099325A1, US2004/0240580A1, US2004/0208257A1, US2004/0170231A1, and US2004/0109509A1; International Patent Application Publication Nos. WO/1998/044633 and WO/2004/053810; A. Bessios et al., Transition-limiting codes for 4-PAM signaling in high speed serial links, Global Telecommunications Conference, 2003, GLOBECOM '03, IEEE, Volume 7, pages 3747-3751, December 1-5, 2003; and V. Stojanovic, Channel-Limited High

Speed Links: Modeling, Analysis and Design, PhD Dissertation,
Stanford University, September 2004.

Also, claim 1 recites specific steps for determining an optimal transition-limiting code for use in a multi-level signaling system. The steps comprise determining a coding gain for each of a plurality of transition-limiting codes; selecting one of the plurality of transition-limiting codes having a largest coding gain for use in the multi-level signaling system; and employing the selected transition-limiting code in the multi-level signaling system to at least reduce a number of full-swing transitions between sequential signals. Each of these steps is well supported in the specification and described in such a manner as to enable one skilled in the art to make and/or use the claimed invention (e.g., see paragraphs [0011]-[0014], [0037], [0052], [0054], [0056], [0058], and [0059] in U.S. Patent Application Publication No. US2004/0170231A1). The remaining claims are equally well supported in the specification.

At this point it should be noted that, as stated in MPEP § 2163.02, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed. The subject matter of the claim need not be described literally (i.e., using

the same terms or in haec verba) in order for the disclosure to satisfy the description requirement.

In view of the foregoing, it is respectfully requested that the aforementioned enablement rejection of claims 1-11 be withdrawn.

II. THE WRITTEN DESCRIPTION REJECTION OF CLAIM 11

On page 2 of the Office Action, claim 11 was rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is hereby respectfully traversed.

The Examiner asserts that there is no support in the specification for "readable storage medium."

Applicants respectfully disagree. Specifically, the specification clearly recites that "it is within the scope of the present invention that such instructions may be stored on one or more processor readable carriers (e.g., a magnetic disk), or transmitted to one or more processors via one or more signals." Applicants respectfully submit that one skilled in the art would understand that a processor readable carrier in the form of, for example, a magnetic disk, would encompass a processor readable storage medium since such a processor readable carrier is a medium (e.g., a magnetic disk) that stores

computer instructions. Applicants would also like to remind the Examiner that a patent applicant may be his/her own lexicographer.

In view of the foregoing, it is respectfully requested that the aforementioned written description rejection of claim 11 be withdrawn.

III. THE NON-STATUTORY SUBJECT MATTER REJECTION OF CLAIM 11

On page 3 of the Office Action, claim 11 was rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. This rejection is hereby respectfully traversed.

The Examiner asserts that a storage medium is non-statutory subject matter.

Applicants respectfully disagree. Specifically, there is a long list of cases that clearly define a storage medium as being statutory subject matter. For example, Applicants direct the Examiner's attention to the case law set forth in In re Beauregard, 35 USPQ 2d 1383, 1384 (Fed. Cir. 1995), In re Lundgren, (B.P.A.I. Case No. 2003-2088 (September 28, 2005)), and others, which clearly provide a patentable subject matter basis for a storage medium.

In view of the foregoing, it is respectfully requested that the aforementioned non-statutory subject matter rejection of claim 11 be withdrawn.

IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

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